

# A new *Ctenophthalmus* (Siphonaptera) from Ivory Coast

by

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With 4 figures

## ABSTRACT

*Ctenophthalmus* (*Ethioctenophthalmus*) *digitosignatus* n. sp. (♂♀) is described and figured. The new species belongs to the *moratus*-group and is closely related to *tertius* Smit, but is characterized by the shape of the telomere of the clasper and the fingerprint pattern on the two asymmetrical apical parts of the palliolum.

### *Ctenophthalmus* (*Ethioctenophthalmus*) *digitosignatus* n. sp. (Figs. 1-4)

Type material: ♂ holotype and 1 ♂ 1 ♀ paratypes, Forest of Yapo, near Yapo Gare, 5° 48' N 4° 08' W, Agboville, Ivory Coast, 21./22.III.1977, sieved from debris, 1g. I. Löbl. Holotype deposited in the collections of the Muséum d'Histoire naturelle, Geneva.

Diagnosis: Belonging to the *moratus*-group because of the presence of a notch just above the oral angle, the new species is easily distinguishable from the other species of that group by the structure of the genitalia.

Description: Frontal row with 6 bristles, the smallest one situated in a notch on the anterior margin of the frons above the oral angle; eye well developed; genal spines sharply pointed; labial palps reaching to two-thirds the length of the fore coxa. Pronotal ctenidium consisting of 16 spines, pronotum dorsally as long as the dorsal pronotum spines; metepimeron with 6 bristles. Last hind tarsal segment with three or four (normally four) lateral plantar setae on each side.

Male: 3 to 5 short bristles anterior to the spiracular fossa of tergum VIII. Sternum VIII (Fig. 1) as in *tertius*. Apodeme of tergum IX (Fig. 2) with a quite well developed interior sclerotic area. Basimere (Fig. 2) with a broad but only slightly projecting lower lobe, four strong and several shorter setae along the dorso-posterior margin and one

strong submarginal bristle near the upper corner of the lower lobe, acetabular seta strong. Telomere broad, widest in the middle, with a broadly truncate apex, posterior margin in the upper half slightly concave. In the middle of the posterior margin there is a group of one long and two shorter setae and above it a marginal sclerotization.

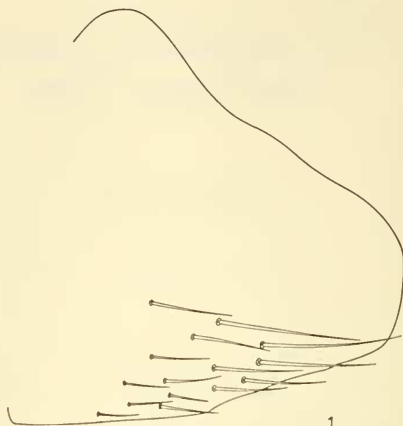


FIG. 1.

*Ctenophthalmus digitosignatus* n. sp. (holotype). Sternum VIII.

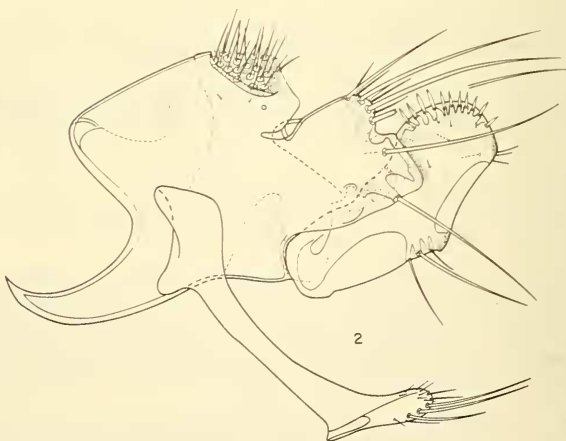


FIG. 2.

*Ctenophthalmus digitosignatus* n. sp. (holotype). Segment IX.

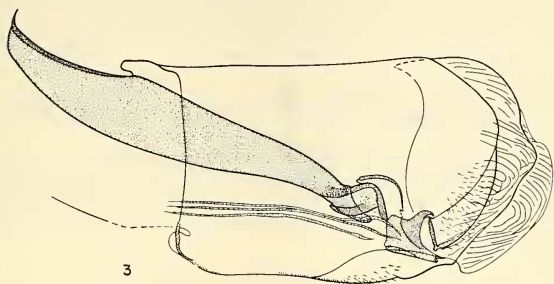


FIG. 3.

*Ctenophthalmus digitosignatus* n. sp. (holotype). Phallosome.

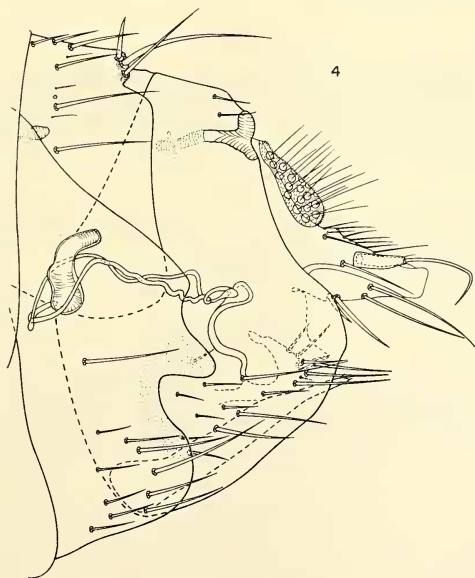


FIG. 4.

*Ctenophthalmus digitosignatus* n. sp. Terminal abdominal segments of female paratype.

Apex with 11 marginal sensilla; a group of three small setae is situated just below the sclerotized posterior angle of apex. Inner surface of telomere smooth, with several small bristles. Distal arm of sternum IX (Fig. 2) only a little more than 1/3rd the length of the proximal arm, the rounded apex bearing two large and a number of small setae as well as a medium-sized one ventrally.

Phallosome (Fig. 3): Palliolum dorsally expanded, the two asymmetrical apical parts with a distinct fingerprint pattern.

Female: (Fig. 4): Posterior margin of sternum VII partially slightly sclerotized, with a well-developed sinuate median lobe and broadly rounded lower lobe below a deep sinus. Ductus bursae longer than dorsal pronotum spines. Hilla a little longer than bulga of spermatheca, bulga slightly narrower anteriorly than posteriorly, its lower outline slightly concave.

Remarks: The new species seems to be closely related to *C. tertius* Smit, 1960 described also from Ivory Coast, but it differs from the latter by the shape of the telomere (apex, more rounded posterior margin less sinuate), the shorter distal arm of sternum IX and principally by the fingerprint pattern on the asymmetrical apical parts of the palliolum. It shares this character with *C. ghanensis* Segerman, 1971, which also has a submarginal seta on the lower lobe of the basimere, but its posterior margin is rounded (straight in *digitosignatus*), while the telomere has a well developed dorso-posterior angle. In the female of *ghanensis* the upper lobe of sternum VII is much more pronounced and longer than the median lobe.

#### ACKNOWLEDGEMENTS

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#### RÉSUMÉ

La nouvelle espèce *Ctenophthalmus* (*E.*) *digitosignatus* est décrite provenant de Yapo en Côte d'Ivoire. Elle fait partie du groupe *moratus*, et elle est caractérisée par la structure de l'organe génital mâle et du sternum VII femelle.

#### LITERATURE

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